



U.S. Department
of Transportation

Federal Aviation
Administration

Advisory Circular

Subject: FIRE DEPARTMENT RESPONSIBILITY IN
PROTECTING EVIDENCE AT THE SCENE OF AN
AIRCRAFT ACCIDENT

Date: 09/03/99

Initiated by: AAS-300

AC No: 150/5200-12B

Change:

1. **PURPOSE.** This advisory circular (AC) furnishes general guidance for airport employees, airport management, and other personnel responsible for aircraft rescue and firefighting (ARFF) operations at the scene of an aircraft accident on the proper preservation of evidence. It explains the need for preservation of evidence and details operational actions which may be permitted if performed in the interest of preserving life.
2. **CANCELLATION.** AC 150/5200-12A, *Fire Department Responsibility in Protecting Evidence at the Scene of an Aircraft Accident*, dated April 8, 1985, is cancelled.
3. **RELATED READING MATERIAL.** Copies of the National Transportation Safety Board's (NTSB) brochure, *Civil Aircraft Accident Investigation Guidelines*, can be obtained by contacting the National Transportation Safety Board, Office of Government and Public Affairs, 490 L'Enfant Plaza, SW., Washington, DC 20594, or by calling (800) 877-6799, or (202) 314-6551.
4. **GENERAL.**
 - a. The cause of an aircraft accident has often been determined from a detailed analysis of the wreckage and the relationship between various aircraft parts and occupants. Therefore, it is essential that wreckage not be moved indiscriminately or damaged during rescue operations. This is not to imply that during ARFF operations wreckage may not be disturbed if a life is involved or if fire can be further suppressed

or extinguished by judicious removal of the wreckage. The governing regulation (NTSB Regulation, Title 49 CFR, Part 830, Par. 830.10(b) pertaining to the preservation of aircraft wreckage, mail, cargo, and records, allows for the removal of aircraft components, mail, and cargo aboard the aircraft to the extent necessary to:

- (1) Remove persons injured or trapped;
- (2) Protect the aircraft from further damage; and
- (3) Protect the public from injury.

It further states that:

"Where it is necessary to disturb or move aircraft wreckage, mail or cargo, sketches, descriptive notes, and photographs shall be made, if possible, of the original position and condition of the wreckage and any significant impact marks."

It is not intended to imply that ARFF operations should be delayed pending the preparation of such sketches or photographs. However, to the best of their ability, the firefighters or rescue personnel should attempt to remember the original location of any wreckage, human bodies, mail, or cargo removed from the accident scene. As soon as practical, all personnel should document in writing all of their actions and activities during their involvement in the accident. These documents should be made available to appropriate investigative agencies.

- b. Typical activities of law enforcement authorities at an accident scene include the following:

(1) Setting up security so as to allow no one inside the wreckage area other than those necessary for occupant removal, firefighting, or adjusting and removing an article from the wreckage to prevent it from becoming lost or further damaged. In such cases, they should request that the individuals involved document (by photographing or other means) what has been done and why. Example: Removal of a battery from the aircraft to prevent a new fire.

(2) After a fire has been extinguished by firefighters, all personnel inside the secured area should be cautioned to keep their activities around the wreckage to a minimum to prevent unnecessary wreckage disturbance and eradication of valuable evidence, such as ground scars.

- c. When aircraft entry doors or emergency exits are jammed or blocked and cannot be used for aircraft occupant escape or rescue, forcible entry into the fuselage is not considered destruction of evidence. Forcible entry includes such actions as forcing exit doors or cutting exits in the fuselage.

5. OPERATIONS.

- a. The saving of aircraft occupants' lives is the primary objective. All other considerations, such as preservation of wreckage, must be subordinate to the rescue operations. Therefore, ARFF personnel in the performance of their primary mission of rescue through fire control or extinguishment should not be hampered or restrained with the restrictions governing the preservation of evidence. However, when ARFF operations are in the final stages (salvage and overhaul), care should be exercised to avoid unduly disturbing any evidence that may aid in determining the cause of the aircraft accident. Careful preservation of cockpit instruments, controls, areas of primary

structural failure or damage, etc., in their original position is important. Note any changes made.

- b. To assure complete fire extinguishment and accountability of all persons, firefighters are expected to make a thorough examination of the aircraft cabin and storage compartments. During these cleanup or securing operations make special notes or photographs of any moved items.

- c. Airport fire departments and security personnel should establish procedures whereby:

(1) Photographic coverage of the accident scene will be accomplished. This may require that a camera, which is easy to operate, be made available by the airport operator complete with film and batteries.

(2) Security of the accident scene is provided until the operator of the aircraft or the NTSB/FAA accident investigation team takes custody.

Security of the accident scene is the responsibility of the airport owner until it is released by NTSB/FAA. The aircraft owner or the owner's representative may then assume custody of the aircraft.

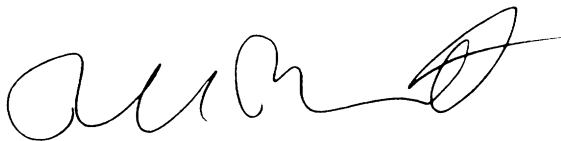
- (3) Voice and flight data recorders are located and protected. These items are of vital importance to accident investigations; therefore, if found detached from the aircraft, their location should be carefully noted. If attached to the aircraft, they should not be removed except to preserve them from any further fire damage. As a general rule, the voice and flight data recorders are located in the rear of the fuselage. Spherical recorders are painted bright yellow, while rectangular recorders are red or international orange. Once located and secured, the recorders must not be tampered with or opened.

- (a) There are several types of flight data recorders. The

older models use metal foil and newer ones use digital magnetic tape. They measure approximately 5 x 8 x 21 inches.

(b) There are several types of voice recorders. Newer models using digital magnetic tape measure approximately 5 x 8 x 13 inches.

- d. Airport management should ensure that all airport fire department personnel are thoroughly familiar with the reference material listed under paragraph 3, the Airport Certification manual and 14 CFR, Part 139. In addition, the principles in this AC should be reflected in departmental operating instructions and included in ARFF personnel training programs, and the Emergency Plan elements of the Airport Certification Manual.

A handwritten signature in black ink, appearing to read 'DLB', with a stylized flourish at the end.

DAVID L. BENNETT
Director of Airport Safety
and Standards

U.S. Department
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**Federal Aviation
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